

Abstract

a Transfection particles for delivery of nucleic acid into higher eucaryotic cells *in vitro* and *in vitro* comprises one or more nucleic acid molecules condensed by organic cationic molecules. The discrete and stable particles are obtained by complexing the nucleic acid molecules with identical or different organic cationic precursor molecules without crosslinking nucleic acid molecules, and covalently linking the precursor molecules to each other on the nucleic acid template. For specific cellular targeting, the particles may carry targeting molecules, e.g. sugars. Preferred cationic precursor molecules are lipophilic detergents that are linked to form lipids. The particles contain preferably only one nucleic acid molecule which makes them useful for gene therapy and for delivery of large DNA molecules.